

Hudson River PCBs Site

Briefing for the Administrator
December 6, 2010

Confidential, Pre-Decisional
DRAFT – Dec. 4, 2010 (6:00 p.m.)

Ex. 5 Deliberative Process (DP)

The Site

- ~200 Miles of the Hudson River, from Fort Edward south to NYC.
- Historic and economically important river
- Contaminated by PCBs discharged by General Electric
- 20 years of debate and controversy leading up to ...
- ... 2002 ROD selected a remedy for the “Upper Hudson”
 - 40-mile stretch from Fort Edward south to Albany
 - Divided into 3 River Sections: RS1 = 6 miles, RS2 = 5 miles, RS3 = 29 miles
- Primary objective of remedy: reduce PCB concentrations in fish, allowing significant relaxation of fish consumption advisories.

Selected Remedy

- Selected Remedy: Dredging for mass removal
 - Selection of areas to be dredged based on two criteria:
 - (1) Mass Per Unit Area (MPA), and
 - (2) Surface Concentration
 - GOAL: “removal of all PCB contaminated sediments within areas targeted for dredging, with an anticipated residual of approximately 1 ppm Tri+ PCB (prior to backfilling)”
 - Note: 1 ppm Tri+ PCB = approx. 3 ppm Total PCB

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Engineering Performance Standards

- 3 EPS Developed BY EPA after ROD TO GOVERN PHASE 1:
 - Residuals Standard
 - Specified how much PCBs could be left behind
 - Required multiple dredging passes to try to achieve standard
 - Some capping (after significant mass removal) was recognized to be inevitable.
 - Resuspension Standard
 - Limited water column concentrations downstream of dredging
 - Limited “Load” – mass of PCBs moving downstream as a result of dredging
 - Productivity Standard
 - Set minimum number of cubic yards dredged/year
 - Goal: 6 dredging years to complete entire project

Residuals Standard

- Backfill areas where average concentration of top 6" core segments ≤ 1 ppm Tri+PCB
 - use multiple DREDGE passes to achieve this target
- Cap areas that, after multiple dredging passes, would still cause average surface concentration to exceed 1 ppm Tri+PCB
 - EPS estimate: 5% - 8% of area would have to be capped due to residuals >1 ppm Tri+
 - Estimate did not include areas that would need to be capped for reasons beyond GE's control: bedrock, clay, and some near-shore areas.

Estimated Scope of Project

- ROD Estimates:
 - ~2.6 million cubic yards to be dredged
 - \$460 million cost
- Design Estimates (work done by GE under AOC):
 - Based on ~50,000 samples
 - ~500 acres within dredge footprint
 - ~1.8 million cubic yards to be dredged

Unique Process

- Two Phase Approach
 - GE agreed in 2005 Consent Decree to perform Phase 1; reserved right to “opt out” of Phase 2
- Phase 1 = 1st year of dredging; followed by...
- ... Independent Peer Review of Phase 1 (to evaluate ability to meet EPS simultaneously); followed by ...
- ... EPA issues decision about changes to EPS and related elements for Phase 2; followed by...
- ... GE makes “opt in/out” decision.
 - If GE opts in, Consent Decree governs Phase 2 work
 - If GE opts out, parties are left with all legal authorities and rights
 - EPA would expect to issue UAO for Phase 2

Results of Phase 1

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